Map Title:

Groundwater Level Comparison in Selected Central Valley Water Wells (Fall 2008 Groundwater Levels Relative to Groundwater Levels during Historic Drought Periods 1977-1978 and 1991-1992) (Go to map)

Map Purpose:

This map provides groundwater level information for current drought conditions. It is part of the ongoing Department of Water Resources Drought Communication and Public Outreach effort.

Explanation:

Colored dots are located at selected water well sites where the following groundwater level measurement data is available:

- Fall¹ 2008, and;
- Fall 1977 or fall 1978, and;
- Fall 1991 or fall 1992.

Selected water well sites within the Sacramento Valley also have the follow well construction data available:

- Depth of well, and;
- Depth of top of well's upper perforation interval², and;
- Depth of bottom of well's lower perforation interval².

The dot color indicates a difference between groundwater levels during historic drought periods and groundwater levels during the current drought period, which is described as follows:

- Green indicates where current drought period groundwater levels are at least five feet above historic drought period water levels, for the described fall periods.
- Yellow indicates where current drought period groundwater levels are within five feet (plus or minus) of historic drought period water levels, for the described fall periods.
- Orange indicates where current drought period groundwater levels are at least five feet below historic drought period water levels, for the described fall periods.

Where groundwater level comparisons differ between individual historic drought periods, the lower water level was selected. For example, if a well shows that the 2008 water level is within five feet of the water level in 1991 and more than five feet below the water level in 1977, then an orange dot is placed on the map.

Data Source:

California Department of Water Resources Water Data Library, Groundwater Module (wdl.water.ca.gov)

Discussion:

This map provides information about groundwater levels as measured in water wells, and depicts a comparison of the actual groundwater level measurement for the fall periods previously mentioned. No analysis was conducted to prepare this map aside from selecting wells and directly comparing groundwater level measurements for different time periods (described above). Discrepancies between water levels in adjacent wells (displayed as different colored dots adjacent to each other) can result from measuring water levels in wells with different types of constructions (for example, wells with different depths and/or perforation intervals²). The information on this map does not show "real time" water level data, however the depicted information can be updated periodically as groundwater level measurements are collected.

Notes:

Revised: 4/09/2009

¹ For this map "fall" includes the months of September, October, and November.

² Well "perforation interval" denotes the portion of a well open to receive the inflow of groundwater and may consist of slotted casing, well screen, open borehole (no well casing), or other type of opening.